EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE
	PAD No.: 11-051 **Date: 09 May 2011** Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.
All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.

Approval Holder's Name :	**Type/Model designation(s) :**
PEMCO World Air Services, Inc.	Main Deck Cargo Door Installation

STC Number(s):	Several European validations of FAA STC SA2969SO, e.g. CAA UK AAN 24984 and Addendum 1 (EASA approval 2004-3750), later replaced by STC EASA.IM.A.S.02424.
Foreign AD :	None
Supersedure :	None
ATA 29, 52	**Hydraulic Power – Main Cargo Door (MCD) Hydraulic System & Control Panel – Modification** **Doors – MCD & Surround Structure – Replacement / Modification**
Manufacturer(s):	PEMCO Aeroplex, Inc.
Applicability:	Boeing 737-300 series aeroplanes, manufacturer serial numbers 23499, 23500, 23522, 23523, 23524, 23569, 23685, 23766, 23788, 23809, 23810, 23811, 23835, 23836, 23837, 24021, 24028, 24132, 24209, 24277, 24279, 24283, 24364, 24387, 24388, 24463, 24789, 25124, 25401, 25402, 25426, 25744, 26850, 26851, 27125, 27347 and 28898, modified in accordance with FAA STC SA2969SO by using PEMCO MDL 2373 revision I, or earlier.
Reason:	PEMCO STC SA2969SO introduces a large main deck cargo door, converting a passenger Boeing 737-300 into a Boeing 737-300 QC (Quick-Change) or Boeing 737-300 F (Freighter) aeroplane. the first design associated with FAA STC SA2969SO produced in-service cracking of the door and surround structure after 3 years of continuous service. The FAA performed a review of the STC approval of this modification as a part of a global review of STC freighter conversions implemented in response to other in-service findings. This review, which was primarily focused on in-service experience rather than certification problems, resulted in a group of FAA ADs to correct the deficiencies identified. When the CAA of the United Kingdom performed a validation of this STC, which was concluded on 24 September 2003, potential dormant failures of main cargo actuation and indication systems were identified that could result in door opening in flight, or pressurization of the aeroplane with the door not

	properly closed, latched and locked. To address such risk, European certification specifications (formerly JAR, now CS) 25.783 and 25.1309 demand a high level of integrity for the locking, latching and signalling systems of such doors to safeguard against inadvertent opening in flight. In addition, a number of fundamental non-compliance aspects were identified, e.g. proof of strength (JAR/CS 25.307), for the new modified and affected structure of the fuselage and door; jacking (JAR/CS 25.519), lack of adequate instructions; damage tolerance (JAR/CS 25.571) for the new, modified and affected structure of the fuselage and door; fabrication methods (JAR/CS 25.605), lack of adequate instructions for maintenance and inspection; and emergency landing conditions and stowage compartments (JAR/CS 25.561 and 787), application of the correct inertias in both the passenger and cargo roles. PEMCO recognised the deficiencies in the design of the door systems and has developed changes to the main cargo actuation and indication systems, and a series of modifications to correct the identified non-compliance issues, which are detailed in PEMCO Service Bulletin (SB) 737-29-0011 – *MCD Hydraulic System and Control Panel Upgrade*, and SB 737-52-0033 – *Replace/Upgrade Main Cargo Door and Upgrade Surround Structure*, respectively. These modifications have become part of the FAA STC modification instructions, so only aeroplanes modified before this STC update are affected. This condition, if not corrected, could lead to opening of the cargo door at high altitude, resulting in rapid decompression, flight control difficulties and possible loss of the aeroplane. For the reasons described above, this AD requires the accomplishment of the modifications as described in the referenced PEMCO Service Bulletins.
Effective Date:	[TBD: 14 days after final AD issue date]
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 48 months after the effective date of this AD, modify the aeroplane as required by paragraph (1.1) or (1.2), as applicable: (1.1) For aeroplanes that have been modified in accordance with FAA STC SA2969SO by using PEMCO MDL 2373 at revision G or earlier, accomplish the instructions of PEMCO SB 737-29-0011 and SB 737-52-0033. (1.2) For aeroplanes that have modified in accordance with FAA STC SA2969SO by using PEMCO MDL 2373 at revision H or revision I, accomplish the instructions of PEMCO SB 737-29-0011. (2) Modification of an aeroplane, prior to the effective date of this AD, in accordance with PEMCO SB 737-52-0033 at Revision 4 or earlier, and/or in accordance with PEMCO SB 737-29-0011 at Revision 18 or earlier, as applicable, is acceptable to comply with the requirements of paragraph (1) of this AD. After the effective date of this AD, the instructions of PEMCO SB 737-29-0011 Revision 19 and of PEMCO SB 737-52-0033 Revision 5 must be used. (3) Incorporation of PEMCO SB 737-52-0033 constitutes terminating for the repetitive inspection requirements of FAA ADs 95-06-05, 98-04-41, 2001-09-15 (which superseded AD 95-01-06R1) and 2004-03-23 (which superseded AD 2001-08-07).
Ref. Publications:	PEMCO SB 737-29-0011 Revision 19 dated 19 September 2008. PEMCO SB 737-52-0033 Revision 5 dated 8 March 2007.
Remarks :	1. This Proposed AD will be closed for consultation on 06 June 2011.

	2. Enquiries regarding this PAD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu. 3. For any questions concerning the technical content of the requirements in this PAD, please contact: PEMCO World Air Services, 100 Pemco Drive, Dothan, Alabama 36303, United States of America, Telephone +1 334-983-7062, E-mail technicalsupport@pemcoair.com. Internet http://www.pemcoair.com.